

Questions from the Rapid Equipping Force Expeditionary Lab Industry Day
3 March 2015, Fort Belvoir, Virginia

Administrative Questions

What type of information are you looking for in Attachment A in the 'offered proposed' column? Are you looking for this spreadsheet to be completed and submitted as part of our response to the RFI?

Yes we are looking for whether you can meet the threshold and/or objective of each item. This column also gives you the opportunity to elaborate on the capability you would be providing.

Is there an estimated timeframe for possible RFP release?

We anticipate a two to three week timeframe after the closer of the RFI, the earliest we anticipate the RFP to be released is beginning of April 2015.

Who is the incumbent on the ExLab 3?

Veterans Corps, Applied Minds, and Exponent

Is incumbency a concern here?

Incumbency is not an issue. This is a full and open competition.

Do you have any procurement projections for the ExLab 4? i.e. any estimated projections you might have of production quantities of each package once an award is made?

At this time we are only interested in procuring one ExLab, however, we intend to include an option to buy more.

Testing this will be expensive, especially for one procurement. Are there additional contract options?

There will be an option for additional purchases.

Are you looking for actual prototypes for the RFP or just designs?

The responses to the RFP should include enough design information for the government to evaluate the feasibility of the approach and the scope of the ExLab, e.g., numbers of containers, pallets, sorties, etc. After contract award, we are expecting a complete design package and the fabrication of one complete ExLab, upon Government acceptance of the design.

Is the shelter REQUIRED to be ISU90 or just ISO 20 ft?

No, these configurations are from our existing labs. The new containers will need to meet the specs of being Blackhawk UH60M sling loadable, 4,300lbs.

Technical Questions

Are there any current OEM solutions, for example a CNC Lathe, that are being used in the ExLab 3 and could be shared?

You will have the chance to look at the components within ExLab 3. All components are COTS items. We do not anticipate sharing components from previous Labs to Lab 4 as there is always potential for simultaneous use in different locations. In addition, technological improvements

that have taken place since the fabrication of ExLab 3 should be leveraged for the next generation lab.

Are you looking for space to encourage collaboration? It is not specifically called out in the RFI but seems to be an important aspect of your day-to-day operations.

Yes. Collaboration is very important to the REF's forward operations model. In the current ExLab space is limited and collaboration is hindered by the noise of some of our tools, such as the CNC machine and 3D printer. We are encouraging vendors to be creative with indoor and outdoor space. We are also envisioning the new design to have several components to include an operational integration package with collaborative space, potential living quarters and communications; a limited fabrication capability package and an enhanced fabrication, as outlined in RFI Attachment B.

How are you finding working on the carts during inclement weather? Is it cumbersome using certain tools with cold weather gear?

With the current configuration we are able to construct a shelter over the carts, using a tarp and always have the opportunity to go inside the lab to finish most work. For the last year one ExLab has been stationed at Bagram Air Field, so the team has additional indoor workspace in a building there. However, if we operated the way the ExLab was designed to, in an austere, remote environment, we would be severely limited in our capabilities. We are looking for innovative ways to keep our industrial tools out of the rain. Carts are not an integral/mandatory feature for ExLab 4. They were a convenient means to store tools in ExLab 3, but there are other clever ways to accomplish that mission.

Can you operate the machinery using winter gloves?

Required safety gear for many of the machines include heavy gloves with the same dexterity as standard Army cold weather gear, so that is not a main concern.

When you go downrange, what kind of capability briefing do you give the commanding officer or unit? How do you present yourselves?

We try to present ourselves as a jack-of-all-trades and as the forward element of the Rapid Equipping Force. Typically we give the unit some time to settle in and then visit them with some tools. We look for ways we can instantly improve their situation, whether it is the installation or wiring of security cameras, showing them kit we have produced from the lab, like the light mounts for the handheld IED detectors, or just talking with individuals about their anticipated capability gaps. The forward team is able to collect 10-Liners and send them back to REF Headquarters for action. Essentially, the lab and the forward team work to position the REF as a resource for the tactical unit, the FOB Command and the TAA Commands (formerly Regional Commands).

You are currently using commercial communications technology but have mentioned using NIPR/SIPR systems. How are you envisioning including the communications package into the RFP?

The most important thing with the communications package is that it is self-sustaining. There should be the option to plug into the COP or FOB's larger network but that should not be required. Communications should be like power – we have our own but have the option to use someone else's if we can. Currently, we are leaning toward using government furnished

equipment, but are still exploring options. We would appreciate vendors giving us options based on their experience with the state of the art.

How do you envision the labs being used?

The next generation of labs will be more expeditionary. We anticipate that they may be needed in a new or immature theater at some point, so flexibility is key. Right now we are thinking that there could be three different stages of ExLab operations. For example, stage one would involve an NCO and engineer deploying with the “core” lab capability – communications, power generation, and some simple diagnostic and repair capabilities. Stage two would involve more robust diagnostics, the ability to modify existing gear and small footprint fabrication capability. The third stage is envisioned as a more enduring presence with larger fabrication and repair and would be a more enduring presence.

The RFI outlines that the maximum weight of each module is 4300 pounds. Why? Are there limitations to the number of trips it can take to get all components to a site?

The planning factor for UH60M helicopter pilots is 4300 pounds due to the elevation and environmental conditions in the current theater. We are not limiting the number of trips it would take to get all the components to one site.

Do you foresee wanting to use metallic powder 3D printers?

No. The logistics tail is unacceptable to our expeditionary concept and we view this as a reach-back capability.

Currently the tool carts are outside. Is that strictly for space? Is there any reason why you can't have a separate ISU 90 for welding?

The tool carts were designed with space constraints in mind. We do not foresee any reason why there cannot be a separate ISU 90 for welding.

Does it have to be built in a box?

No. We want you to be creative with this next product. Don't necessarily base it off current design. Efficient use of space for work areas and tool storage and organization is key.

What kind of shipping certifications will it have to meet? Is ISO certification required before or will REF take care of it?

We weren't going to limit it to being ISO compliant. We are planning on going into more detail in the RFP, as we are currently discussing how testing will be funded. We do know that it will have to have a sling-load certification and some limited ATEC testing.

Will testing be at Aberdeen?

REF and ATEC will pick the appropriate location for the test.

Are you planning on making more use of the reach back support?

We use the reach back support quite extensively and will continue to use it in the future. For example, we may have to work with an Army partner lab to 3D print a solution in metal or help solve a problem forward.

Are you planning on using MIL-Spec connectors?

Not all of our products are currently MIL-spec, some are commercial. We are leaning toward using a MIL-spec generator as the current one is very specialized and difficult to sustain downrange. Additionally, when thinking power there are a couple things to keep in mind. First, transforming power is difficult. We many want to use a variety of power distributors (USB, 5 volt, 12 volt, etc.) so that should be anticipated in any design. Another thing is the value of power storage capabilities. If you bring batteries into the mix, that allows for fuel flexibility and brings renewable options into play.

Will you identify systems you like in the RFP?

We will not call out systems by manufacturer, but will include specs for each capability or tool we are looking for in the RFP.

Do the modules need to be stand-alone?

Yes, in that the first module or “core module” needs to be deployable by itself and self-sustaining.

As far as the tools inside the lab, how much are you looking to be fielded? Down to the screwdrivers and hammers or just the larger items?

We want all the tools fielded with the lab, in a phased approach.

How is the current lab moved?

Right now our NCOs and engineers have to pack all the tools into a tricon or ISU 90, then it is all moved with an Air Force pallet. A 25,000lb crane is required to move the 20 foot container.

Why sling-load on a Blackhawk?

The REF Director believes that this lab needs to be capable of being moved to any location. If it can be sling-loaded by a UH60M then you can move it with other helicopters as well. The US Army has more UH60s than any other platform.

Are you hoping that the equipment in this lab will be compatible with the equipment in the earlier labs?

It is not a requirement, but there are some software compatibility requirements that will be outlined in the RFP.

Are you using the CNC machine a lot?

Yes. We are looking for an upgraded capability but do use it quite a bit. We will put the specs into the RFP so that it is compatible with our partners' equipment.